ABSTRACT OF THE DISCLOSURE

A radiation image conversion panel is disclosed, comprising on a support at least one stimulable phosphor layer comprising a stimulable phosphor, wherein the stimulable phosphor layer is a layer of vapor-deposited stimulable phosphor having a thickness of 50 μm to 20 mm, and the support exhibits a thermal conductivity of 0.1 to 20 W/mK. A preparation method thereof is also disclosed.